

AMENDMENTS TO THE CLAIMS

Please cancel claims 4-6 and 9-29, and add new claims 30-41 as indicated in the Listing of Claims below, which replaces all prior versions of claims in the application.

LISTING OF CLAIMS

1. (original) A pharmaceutical composition comprising at least one cartilage formation inducing protein selected from the group consisting of FGF-18, Shh, β -catenin, and Wnt proteins in an amount effective to induce cartilage formation.
2. (original) The composition of claim 1 wherein the at least one cartilage formation inducing protein is FGF-18.
3. (original) The composition of claim 1 wherein the at least one cartilage formation inducing protein is FGF-18 in combination with at least one target gene protein selected from the group consisting of the Shh, β -catenin, and Wnt proteins.

Claims 4 through 6 (canceled)

7. (original) An expression vector comprising at least one nucleotide sequence encoding at least one cartilage formation inducing protein selected from the group consisting of FGF-18, Shh, β -catenin, and Wnt proteins.
8. (original) The vector of claim 7 wherein the at least one cartilage formation inducing protein is FGF-18 protein.

Claims 9 through 29 (canceled)

30. (new) The pharmaceutical composition of claim 1, wherein the at least one cartilage formation inducing protein is adapted to be administered to an affected area of a patient in an amount effective to induce cartilage formation in the affected area.

31. (new) The pharmaceutical composition of claim 30, wherein the affected area is a conducting airway.
32. (new) The pharmaceutical composition of claim 31, wherein the conducting airway is at least one of the trachea, bronchi, lung and larynx.
33. (new) The pharmaceutical composition of claim 1, further including at least one of a Bone Morphogenetic Protein and a Transforming Growth Factor, the Bone Morphogenetic Protein and the Transforming Growth Factor adapted to be administered to the affected area in an amount effective to enhance cartilage growth and patterning.
34. (new) The expression vector of claim 7, wherein the at least one nucleotide sequence is adapted to be administered to an affected area of a patient in an amount effective to induce cartilage formation in the cells of the affected area.
35. (new) The expression vector of claim 34, wherein the affected area is a conducting airway.
36. (new) The expression vector of claim 35, wherein the conducting airway is at least one of the trachea, bronchi, lung and larynx.
37. (new) A cell culture comprising a first group of cells in a medium capable of sustaining cell growth, the cells having introduced therein an expression vector comprising at least one nucleotide sequence encoding at least one cartilage formation inducing protein selected from the group consisting of FGF-18, Shh, β -catenin, and Wnt proteins.
38. (new) The cell culture of claim 37, wherein the at least one cartilage formation inducing protein is FGF-18.

39. (new) The cell culture of claim 37, further comprising a second group of cells capable of producing cartilage in the presence of the at least one cartilage formation inducing protein, the first group of cells providing in the medium an effective amount of the at least one cartilage formation inducing protein to induce cartilage formation in the second group of cells.
40. (new) The cell culture of claim 39, wherein the at least one cartilage formation inducing protein provided in the medium is FGF-18.
41. (new) The cell culture of claim 39, wherein the at least one cartilage formation inducing protein provided in the medium is FGF-18 in combination with at least one target gene protein selected from the group consisting of the Shh, β -catenin, and Wnt proteins